

We claim:

1. A method for editing a visual recording stored on a data storage medium, comprising the steps of:

5 evaluating data regarding the content of the visual recording and/or data regarding the manner in which the visual recording was obtained;

10 selecting one or more clips of the visual recording to be included in a summary of the visual recording, based on the evaluation, wherein the selected clips of the visual recording comprise less than all of the visual recording, and wherein the step of selecting and/or the step of evaluating are performed, at least in part, automatically; and

15 discarding parts of the visual recording not included in the visual recording summary so that the discarded parts of the visual recording are no longer stored on a data storage medium.

2. A method as in Claim 1, further comprising the step of storing the visual recording summary on a data storage  
20 medium.

3. A method as in Claim 2, wherein the data storage medium is a portable data storage medium.

4. A method as in Claim 1, further comprising the step of specifying the duration of the visual recording summary.

25 5. A method as in Claim 4, wherein the specified duration of the visual recording summary is greater than or equal to 75% of the duration of the original unsummarized visual recording.

6. A method as in Claim 5, wherein the specified  
30 duration of the visual recording summary is greater than or

equal to 50% of the duration of the original unsummarized visual recording.

7. A method as in Claim 4, wherein the step of specifying the duration of the visual recording summary  
5 further comprises the step of choosing a music selection or selections to accompany the visual recording summary, wherein the duration of the visual recording summary is established in accordance with the duration of the music selection or selections.

10 8. A method as in Claim 4, wherein the step of selecting comprises selecting only candidate clips that meet a specified criterion or criteria, such that the actual duration of the visual recording summary may be less than the specified duration of the visual recording summary.

15 9. A method as in Claim 1, wherein the step of selecting comprises selecting all candidate clips that meet a specified criterion or criteria.

10. A method as in Claim 1, wherein the step of evaluating comprises the steps of:  
20 identifying a plurality of candidate clips in the visual recording; and  
evaluating each of the candidate clips regarding the content of the clip and/or the manner in which the clip was obtained.

25 11. A method as in Claim 10, wherein the evaluation of each candidate clip is based on an image stability criterion.

12. A method as in Claim 10, wherein the evaluation of each candidate clip is based on an image saturation criterion.

13. A method as in Claim 10, wherein the evaluation of each candidate clip is based on an edge sharpness criterion.

14. A method as in Claim 10, wherein the evaluation of each candidate clip is based on an image contrast criterion.

5 15. A method as in Claim 10, wherein the evaluation of each candidate clip is based on a garbage content criterion.

16. A method as in Claim 10, wherein the evaluation of each candidate clip is based on a snapshot criterion.

17. A method as in Claim 10, wherein the evaluation of  
10 each candidate clip is based on a front-loading criterion.

18. A method as in Claim 10, wherein the evaluation of each candidate clip is based on an audio content criterion.

19. A method as in Claim 10, wherein the evaluation of each candidate clip is based on a camera hints criterion.

15 20. A method as in Claim 10, wherein the step of evaluating each of the candidate clips comprises the step of computing a score for each candidate clip based on the evaluation of the clip.

21. A method as in Claim 10, wherein the evaluation of  
20 each candidate clip is based on multiple criteria.

22. A method as in Claim 21, wherein the step of evaluating each of the candidate clips comprises the steps of:

25 computing a sub-score for each criterion for each candidate clip based on an evaluation of the clip in accordance with the criterion; and

combining the sub-scores for each candidate clip to produce an overall score for the candidate clip.

23. A method as in Claim 1, further comprising the step of specifying the manner of display of the selected clips in accordance with a format template.

24. A method as in Claim 23, further comprising the step of modifying the result of the evaluation in accordance with an input provided by a viewer of the visual recording regarding the desirability of a part of the visual recording, wherein the step of selecting is based on the modified result of the evaluation.

25. A method as in Claim 1, further comprising the step of modifying the result of the evaluation in accordance with an input provided by a viewer of the visual recording regarding the desirability of a part of the visual recording, wherein the step of selecting is based on the modified result of the evaluation.

26. A method as in Claim 1, implemented on a DVD recorder.

27. A method for creating a summary of a visual recording, comprising the steps of:

evaluating data regarding the content of the visual recording and/or data regarding the manner in which the visual recording was obtained;

specifying the manner of creation and/or display of the visual recording summary in accordance with a format template; and

selecting one or more clips of the visual recording to be included in the summary of the visual recording, based on the evaluation and the format template, wherein

the selected clips of the visual recording comprise less than all of the visual recording, and wherein the step of selecting and/or the step of evaluating are performed, at least in part, automatically.

5        28. A method as in Claim 27, wherein the format template includes data that can be used to establish the duration of the visual recording summary.

29. A method as in Claim 27, wherein the format template includes data that can be used to establish the  
10 duration or durations of clips to be included in the visual recording summary.

30. A method as in Claim 27, wherein the format template includes data that can be used to establish the weight to be assigned in the step of selecting to a criterion  
15 used in the step of evaluating.

31. A method as in Claim 27, wherein the format template includes data that can be used to establish the order of display of clips in the visual recording summary.

32. A method as in Claim 27, wherein the format  
20 template includes data that can be used in creating transitions between clips and/or other special effects in the display of clips in the visual recording summary.

33. A method as in Claim 27, wherein the format template includes data that can be used to select music to  
25 accompany the display of clips in the visual recording summary.

34. A method as in Claim 27, further comprising the step of displaying the visual recording summary.

35. A method as in Claim 27, implemented on a DVD recorder.

36. A method for creating a summary of a visual recording, comprising the steps of:

5           evaluating data regarding the content of the visual recording and/or data regarding the manner in which the visual recording was obtained;

          modifying the result of the evaluation in accordance with an input provided by a viewer of the visual recording regarding the desirability of a part of the visual recording; and

10           selecting one or more clips of the visual recording to be included in the summary of the visual recording, based on the modified result of the evaluation, wherein  
15           the selected clips of the visual recording comprise less than all of the visual recording, and wherein one or more of the steps of evaluating, modifying and selecting are performed, at least in part, automatically.

37. A method as in Claim 36, wherein the viewer input  
20 can indicate that the part of the visual recording should be included in the visual recording summary.

38. A method as in Claim 36, wherein the viewer input can indicate that the part of the visual recording should not be included in the visual recording summary.

25           39. A method as in Claim 36, wherein:  
          the step of evaluating comprises the steps of:  
              identifying candidate clips in the visual recording; and  
              evaluating each candidate clip to produce a  
30           score based on the evaluation;

the step of modifying comprises the step of modifying the score of one or more candidate clips in accordance with the viewer input.

40. A method as in Claim 39, wherein the step of  
5 modifying the score comprises the steps of:  
determining a score based on the viewer input; and  
combining the score based on the viewer input with  
the score produced by the evaluation.

41. A method as in Claim 40, wherein the step of  
10 modifying the score further comprises the step of assigning  
relative weights to the score based on the viewer input and  
the score produced by the evaluation.

42. A method as in Claim 36, wherein the part of the  
visual recording is a single visual image.

15 43. A method as in Claim 42, wherein the part of the  
visual recording is a keyframe.

44. A method as in Claim 42, wherein the part of the  
visual recording is a snapshot.

45. A method as in Claim 36, wherein the part of the  
20 visual recording is a clip.

46. A method as in Claim 36, wherein the step of  
modifying comprises the steps of:  
determining the degree of similarity between the  
part of the visual recording with which the viewer input  
25 is associated and another part of the visual recording;  
and  
modifying the result of the evaluation in  
accordance with the degree of similarity between the

part of the visual recording with which the viewer input is associated and another part of the visual recording.

47. A method as in Claim 46, wherein the step of determining comprises successively comparing the part of the  
5 visual recording with which the viewer input is associated to other parts of the visual recording that are progressively temporally farther away until another part of the visual recording is insufficiently similar to the part of the visual recording with which the viewer input is associated.

10 48. A method as in Claim 36, further comprising the steps of:  
displaying a plurality of visual images extracted from the visual recording; and  
monitoring a user input apparatus to identify any  
15 input to the user input apparatus regarding the desirability of one of the plurality of visual images.

49. A method as in Claim 48, wherein the step of displaying comprises the step of displaying a plurality of visual images in sequence over a period of time.

20 50. A method as in Claim 49, further comprising the step of playing music as the plurality of visual images are displayed in sequence.

51. A method as in Claim 36, implemented on a DVD recorder.